

REMARKS

The Office Action of April 7, 2003 has been received and its contents carefully noted. In response, the present Amendment revises independent claims 5, 14, and 15.

Section 3 of the Office Action rejects all of the claims for obviousness on the basis of Egusa et al in view of Uebayashi et al (hereafter simply “Egusa” and “Uebayashi”). Section 4 of the Office Action draws attention to Egusa’s Figure 2, and comments that this Figure shows (among other features) a multiplexer (79) for multiplexing coded first data and coded second data, and a transmitter (78) for transmitting a signal that includes the first and second data. Section 5 of the Office Action acknowledges that “Egusa does not teach the first data and the second data being transmitted at a first transmission power level and a second transmission power level,” with the first and second transmission power levels being controlled independently of each other. However, Section 6 of the Office Action draws attention to Uebayashi’s Figure 4, and comments that Uebayashi’s amplifiers 15 and 16 control the power levels for first and second data independently of each other. Section 6 then concludes that it would have been obvious to adapt Uebayashi’s power amplification concept to Egusa’s system.

It should not be surprising that Applicant respectfully disagrees with this conclusion. There are several reasons for this. One reason is that claim 1 recites that the multiplexed first and second data are transmitted “to another communication station,” and that transmission power control information is received “from the other communication station.” In contrast, Egusa’s multiplexer 79 serves to multiplex data for transmission to **different** communication stations.

It is also submitted that Uebayashi would not have led an ordinarily skilled person to modify Egusa to as to provide an arrangement that includes “a transmission power controller for receiving transmission power control information from the other communication station and for controlling one of the first transmission power level and the second transmission power level independently of the other,” in accordance with claim 1. Uebayashi’s Figure 4 illustrates a mobile station, and the transmitter 10 of the mobile station has two signal paths. The top signal path (Uebayashi’s elements 11, 13, and 15) conveys a request signal, while the bottom signal path (Uebayashi’s elements 12, 14, and

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16) conveys a message signal. The passage at column 4 of the Uebayashi reference, lines 32-39, states:

When the mobile station starts transmission, it first transmits a transmission request signal RQ through a common channel. Receiving the signal RQ from the mobile station, the base station transmits a signal ACK designating a channel particular to the mobile station. Receiving the signal ACK from the base station, the mobile station starts a message signal MSG through the particular channel designated.

An ordinarily skilled person would understand from this passage that Uebayashi's mobile station 10 sends a transmission request signal RQ, and if the base station sends a signal granting the request, the mobile station then sends a message signal MSG. Uebayashi's message signal MSG is transmitted after his request signal RQ, and is **not** multiplexed with the request signal RQ. An ordinarily skilled person would not even consider multiplexing Uebayashi's request signal RQ and his message signal MSG, since the request signal RQ **necessarily precedes** the message signal MSG, and an ordinarily skilled person would see no reason to continue transmitting the request signal RQ after the message signal MSG has begun. Accordingly, it is respectfully submitted that Uebayashi's arrangement would **not** have led an ordinarily skilled person to modify Egusa's system so as to achieve the invention defined by claim 1.

Independent claim 5 provides that a communication station receives first and second data from another communication station, with first data being transmitted at a first transmission power level and with the second data being transmitted at a second transmission power level. The claim also provides that the communication station includes a receiver and a processor for decoding the first and second data. Transmission power control information is generated "based on the first data and the second data received by the receiver, the transmission power control information causing control of one of the first transmission power level and the second transmission power level independently of the other." The transmission power control information is then transmitted to the other

communication station. Claim 5 has been amended to recite that “the first data and the second data are multiplexed with each other.”

In contrast to what is recited in claim 5, the demultiplexer 81 shown in Egusa’s Figure 2 provides signals to a plurality of receivers. That is to say, the one receiver that is explicitly shown in Egusa’s Figure 2 does **not** receive first and second data that are multiplexed with each other and that have transmission power levels that are independently controlled. Nothing in the Uebayashi reference would lead an ordinarily skilled person to modify Egusa’s arrangement in accordance with claim 5.

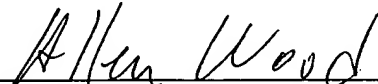
Independent claim 14 has been amended so as to stress that the coded first and second data are multiplexed with each other. Similarly, independent claim 15 has been amended to recite that the first data and the second data are multiplexed with each other. Accordingly, it is respectfully submitted that the inventions defined by claims 14 and 15 are patentable over the references, for reasons similar to those discussed above.

Since the remaining claims depend from the independent claims discussed above and recite additional limitations to further define the invention, it is respectfully submitted that they are patentable along with their independent claims and need not be further discussed. It is nevertheless noted that dependent claim 6 recites that “the transmission control information is generated in such a manner as to reduce a difference between the first difference between a required received quality and an actual received quality of the first data and a second difference between a required received quality and an actual received quality of the second data.” It is respectfully submitted that neither reference suggests generating transmission control information so as to reduce the difference between such first and second differences.

For the foregoing reasons, it is respectfully submitted that the application is now in condition for allowance. Reconsideration of the application is therefore respectfully requested.

Respectfully submitted,

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Allen Wood - Reg. No. 28,134
RABIN & BERDO, P.C.
Telephone: 202-371-8976
Telefax: 202-408-0924
CUSTOMER NO. 23995

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ATTACHMENT – CLAIM CHANGES

This attachment includes claims that are being rewritten in the present Amendment, with brackets being used to identify deletions from the previous version of the rewritten claims and with underlining being used to identify additions to the previous version.

5. (Twice Amended) A communication station for receiving first data and second data transmitted from another communication station, the first data and the second data being transmitted at a first transmission power level and a second transmission power level, respectively, the communication station comprising:

a receiver for receiving a signal including the first data and the second data;

a processor for decoding the first data and the second data;

a control information generator for generating transmission power control information based on the first data and the second data received by the receiver, the transmission power control information causing control of one of the first transmission power level and the second transmission power level independently of the other; and

a transmitter for transmitting the transmission power control information to the other communication station,

wherein the first data and the second data are multiplexed with each other.

14. (Twice Amended) A communication station for transmitting first data and second data on a reverse-link and for receiving third data and fourth data on a forward-link in response to the first data and the second data, the communication station comprising:

a coder for coding the first data and the second data;

a multiplexer for multiplexing the coded first data and the coded second data with each other;

a transmitter for transmitting a signal including the first data and the second data that are multiplexed with each other to another communication station, the first data and the second data being transmitted at a first transmission power level and a second transmission power level, respectively;

a receiver for receiving the third data and the fourth data;

a processor for separating transmission power control information from the third data and the fourth data;

a transmission power controller for controlling one of the first transmission power level and the second transmission power level independently of the other, based on the separated transmission power control information; and

a control information generator for generating further transmission power control information based on reception states of the third data and the fourth data, the further transmission power control information causing control of one of the third transmission power level and the fourth transmission power level independently of the other, wherein the further transmission power control information is transmitted together with the first data and the second data.

15. (Twice Amended) A communication system comprising:

a first communication station for transmitting a signal including first data and second data at a first transmission power level and a second transmission power level, respectively; and

a second communication station for receiving the first data and the second data transmitted from the first communication station, wherein:

the second communication station generates transmission power control information based on the received first and second data, and transmits the generated transmission power control information to the first communication station, and

the first communication station receives the transmission power control information from the second communication station, and controls one of the first transmission power level and the second transmission power level independently of the other based on the transmission power control information,

wherein the first data and the second data are multiplexed with each other.